

**What is Claimed Is:**

1. In a graphical modeling environment, a method comprising the steps of:  
5 receiving a user request to define a property for a component of a graphical model;  
generating a preview of code representative of the component of the block diagram  
prior to generation of code for the graphical model; and  
displaying the preview of the code on a graphical user interface.
- 10 2. The method of claim 1, wherein the step of defining a setting for a component  
comprises entering a parameter in a graphical user interface.
3. The method of claim 2, wherein the generated code is displayed on the same graphical  
user interface used to enter the parameter.
- 15 4. The method of claim 1, wherein generated code comprises a subset of code for the  
component.
5. The method of claim 4, wherein the subset of code corresponds to the setting defined  
20 by the user.
6. The method of claim 1, wherein the step of generating code comprises a predictor  
mechanism generating an estimation of the code.
- 25 7. The method of claim 1, wherein the step of generating code comprises an execution  
engine generating code corresponding to the component.
8. The method of claim 1, wherein the generated code comprises a symbolic, non-literal  
representation of code corresponding to the component.
- 30 9. The method of claim 1, wherein the generated code comprises pseudo-code.
10. The method of claim 1, wherein the steps of generating and displaying a preview of  
code execute in real-time after receiving the user request.

11. The method of claim 1, further comprising the step of altering the property for the component after the step of displaying the generated code.

5 12. The method of claim 11, further comprising the steps of generating code representative of the altered property and displaying the code representative of the altered property on the graphical user interface.

10 13. The method of claim 1, further comprising the step of altering a second property in the graphical model after the step of displaying the generated code.

14. The method of claim 11, further comprising the steps of generating code representative of the altered second property and displaying the code representative of the altered property on the graphical user interface.

15

15. The method of claim 1, wherein the component comprises one of a block, a signal, a subsystem and a custom storage class.

20 16. The method of claim 1, wherein the user defines the property by entering a parameter for the component in a dialog box associated with the component.

17. The method of claim 16, wherein the dialog box includes a code preview field for displaying the code.

25 18. The method of claim 1, wherein the steps of generating code representative of the component of the block diagram and displaying the generated code on a graphical user interface are executed automatically in response to the user defining the property.

30 19. In a graphical modeling environment, a method comprising the steps of:  
automatically updating a preview of code representative of a setting of a component of a graphical model in response to the user altering the setting; and  
displaying the updated code on a graphical user interface.

20. The method of claim 19, wherein the user alters the setting using the graphical user interface.

21. The method of claim 19, wherein graphical user interface displays the updated code in real time after the step of the user altering the setting.

22. The method of claim 19, further comprising the step of the user canceling the alteration of the setting after viewing the code.

23. A medium for use with an electronic device holding instructions executable by the electronic device for performing a method, comprising the steps of:  
receiving a user request to define a property for a component of a graphical model;  
generating a preview of code representative of the component of the block diagram prior to generation of code for the graphical model; and  
displaying the preview of the code on a graphical user interface.

24. A medium for use with an electronic device holding instructions executable by the electronic device for performing a method, comprising the steps of:  
automatically updating a preview of code representative of a setting of a component of a graphical model in response to the user altering the setting; and  
displaying the updated code on a graphical user interface.

25. A system for generating and displaying a graphical programming application, comprising:  
user-operable input means for inputting data to the graphical programming application;  
a display device for displaying a graphical model; and  
an electronic device including memory for storing computer program instructions and data, and a processor for executing the stored computer program instructions, the computer program instructions including instructions for providing a code preview to a user on the display device, wherein the code preview displays code representative of a component of the block diagram after the user defines a property of the component using the user-operable input means.

26. The system of claim 25, wherein the input means comprises a graphical user interface displayed on the display device.

27. The system of claim 26, wherein the graphical user interface includes a field for  
5 displaying the code preview.

28. A system for generating and displaying a graphical programming application,  
comprising:

10 user-operable input means for inputting data to the graphical programming  
application;

a display device for displaying a graphical model; and

an electronic device including memory for storing computer program instructions and  
data, and a processor for executing the stored computer program instructions, the computer  
15 program instructions including instructions for automatically updating code representative of  
a setting for a component in the graphical model in response to the user altering the setting;  
and displaying the updated code.

29. The system of claim 28, wherein the input means comprises a graphical user interface  
20 displayed on the display device.

30. The system of claim 29, wherein the graphical user interface includes a field for  
displaying the updated code.

25